



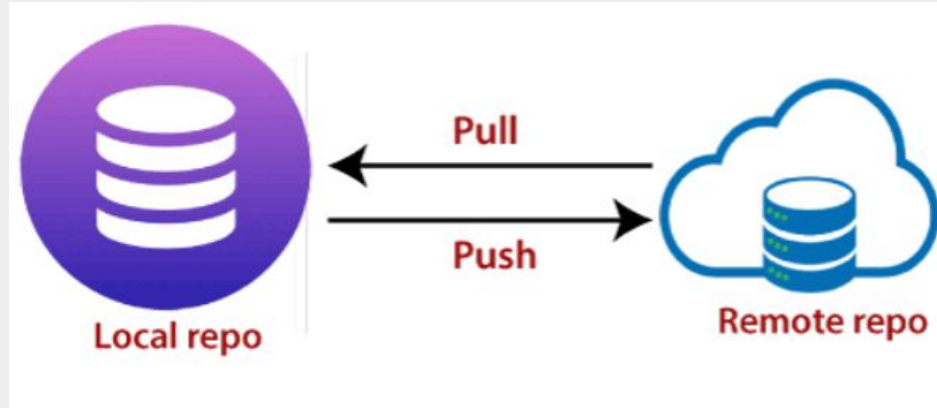
git



GitHub

# Remote Repositories


Remote repositories are the repositories hosted in someone else's server. This allows developers to work remotely in coordination with the team. **GitHub** provides such facilities where user can host, manage and build projects plus Git will keep track of the changes made to the code.



# Working with GitHub

- We created a repository using web version of Github named Project-X, kept it public and did not initialize README.
- We will now be using command line to set up my repository.
- We're going to push the existing repository that We've got locally to the newly created remote repo on GitHub.

## Quick setup — if you've done this kind of thing before

 Set up in Desktop or **HTTPS** **SSH**

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

## ...or create a new repository on the command line

```
echo "# Project-X" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/tabloidplatypus/Project-X.git
git push -u origin main
```

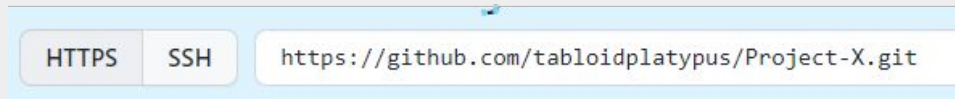
## ...or push an existing repository from the command line

```
git remote add origin https://github.com/tabloidplatypus/Project-X.git
git branch -M main
git push -u origin main
```

# Working with GitHub

- For that, https address(URL) of our remote repository is required.
- And to push the local repo to GitHub, required code is:

Address of GitHub repo:



Code for pushing repo using command line:

```
git remote add origin https://github.com/tabloidplatypus/Project-X.git  
git branch -M main  
git push -u origin main
```

# Working with GitHub

Let's look at the number of commits we made on our local repo with “**git log**”.

We can see that we made total 3 commits.

Now, we are going to push all three commits to GitHub.

```
$ git log
commit 8464e177c0f80080e1d1ca295d094fdb358c6a1d (HEAD -> master)
Author: [REDACTED]
Date: Tue May 17 14:04:17 2022 +0545
```

remaining file

```
commit 0ddb1529fe975f5bc7dd4bc205aca91dc1018906
Author: [REDACTED]
Date: Tue May 17 14:01:42 2022 +0545
```

Second Lot Commit

```
commit 09abe8ed2105aa007979b6df22f92859de186ced
Author: [REDACTED]
Date: Tue May 17 13:24:52 2022 +0545
```

Initial Commit

# Working with GitHub

For pushing the commits to GitHub, first we need to create a “**remote**”.

It's basically way of telling our local repository that we have created a remote repository somewhere on the internet and we would like to transfer all of our commit over there.

Command we use for this purpose is:  
“**git remote add origin** <URL address of our remote repo>”. Origin is simply the name of our remote and we can name it anything we want but by convention we simply keep the name “origin”.

```
$ git remote add origin https://github.com/tabloidplatypus/Project-X.git
```

The remote repo is created. Now, we can push local repo to remote repo using “origin”.

# *Working with GitHub*

Now, we use command “**git branch -M main**” and what it basically does is it changes our position from master to main.

Before:

```
/Git Practice (master)
```

```
$ git branch -M main
```

After:

```
/Git Practice (main)
```

# Working with GitHub

Before the last step, we should be sure that the generic credentials for github is correct.

If you're doing it for the first time, perform the code in right hand side.

Only using the first one might also work.

In command-line (see [git credential](#)), for a manager core credential helper:

- Get the old password or token:

```
printf "protocol=https\nhost=github.com\nusername=<me>" | \
git credential-manager-core get

# output:
protocol=https
host=github.com
username=<me>
password=<old_password_or_token>
```

- Remove the old password:

```
printf "protocol=https\nhost=github.com\nusername=<me>" | \
git credential-manager-core erase
```

(Replace `<me>` by your GitHub user account name)



# *Working with GitHub*

In order to push local repo to remote repo we use “**git push -u origin main**”.

“u -flag” is used to link local repo with remote repo.

“Origin” is the Name of the remote in which we are going to push repo and master is the branch.

```
$ git push -u origin main
Enumerating objects: 12, done.
Counting objects: 100% (12/12), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (12/12), 1.47 KiB | 33.00 KiB/s, done.
Total 12 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/tabloidplatypus/Project-X.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```